

Volume 15, Number 1, 1931. Price 100 Schillers. Monthly  
Subscription 120 Schillers. Postage 10 Schillers.

## Supplementary Notes on Chinese and other Species of *Androsace*.

BY

DR. H. HANDEL-MAZZETTI

(Natural History Museum, Vienna).

Since my Revision of the Chinese Species of *Androsace* was published in these Notes,\* I have had the opportunity of studying the complete material in the herbaria at Paris and Kew through an invitation by the Royal Horticultural Society of London and a subvention granted by the Academy of Sciences of Vienna. Thanks to these institutions, I am enabled to make the following additions to my paper:—

*A. Engleri*, (p. 269 under § 44a) insert after "strigillosa": vel praeterea subtilissime furcato-pubescent.

### 2a. *A. runcinata* Hand.-Mzt. Sp. nov.

E radice parva singularis. Folia obovata, 3-6 cm. longa, longitudine 2-fere 3 plo angustiora, rotundata, basi truncata, toto margine crassiusculo, anguste revoluto irregulariter et saepe duplicato-crenata et inferne magis incisa, plurima autem hic fere ad costam runcinato-incisa, lobis latis, rotundatis, deorsum imbricatis, et in petiolum ± distinctum, latum, lamina 3-5 plo breviorem attenuata, demum subcoriacea, supra sparse, subtus sicut petioli densius pauloque longius pilis articulatis induita. Scapi singuli vel pauci, 6½-17 cm. longi, tenues, pilis tenuioribus, eglandulosis, versus 1 mm. longis inferne crebriuscule, superne parce induiti. Umbella glabra. Bracteae linearisubulatae, 3-3½ mm. longae, herbaceae. Pedicelli ad 12, 1-ad 2 cm. longi, rigiduli, tenues. Calyx fructifer obconicus, 4½ mm. longus, duriuscule herbaceus, ultra tertiam partem in dentes triangulares, apicibus crassos, sinibus rotundatis seiunctos fissus, nervis 5 crasse prominuis aliisque tenuibus in sinibus ramosis. (Corolla deest). Capsula crustacea, albida, calycis tubo inclusa; semina magna, fusca, verrucosa.

Kweichou. Majo-Longly, 1908. Cavalerie in herb. Paris.

A very peculiar plant in as much as the leaves recall a *Gerbera*, with hairs matching those of *A. mirabilis* to which it is doubtless

\* Vol. XV., No. LXXV (1927), p. 259.

[Notes, R.B.G., Edin., No. LXXVIII, February 1931.]

allied. Like *A. cordifolia* Wall., it links the subsection *Mirabiles* with *Saxifragifoliae*.

**A. Henryi** (p. 270). Insert: Syn.: *A. geraniifolia* var. *setosa* Knuth p.p.

N.E. Szechuan. Farges 500. W. Szechuan. David. Soulié 531. Mussot 276.

Soulié's plant from A kia tchrong (Kiala) is a more xerophytic, densely hairy form with scapes a little more than twice as long as the leaves. It has nothing to do with *A. geraniifolia*.

4a. **A. refracta** Hand.-Mzt. Sp. nov.

Rhizoma minutum, radicibus fuscis, rigidulis. Folia numerosa, petiolis gracilibus,  $\frac{1}{4}$ – $\frac{1}{2}$  mm. crassis, patenter albido articulato-pilosus; lamina petiolo 2–ultra  $2\frac{1}{2}$  plo brevior, orbicularis, 6–15 mm. diametro, profunde cordata, sinu rotundato lobis contiguis clauso, ad laminae  $\frac{2}{7}$  penetrante, margine grosse lateque et irregulariter crenata, membranacea, sicca dilute viridis, pilis articulatis, flexuosis,  $\frac{1}{4}$  mm. longis utrinque laxe induta et margine ciliata praetereaque glandulis subsessilibus farinipotentibus inspersa. Scapi numerosi, folia aequantes, rigiduli, cum pedicellis bracteis calycibus articulato-hirsuti et subsessili-glandulosi. Bracteae numerosae, 2–4 mm. longae, lineares, tenuiter herbaceae. Pedicelli 4–15, fructiferi rigiduli, 7–12 mm. longi, superiores patuli vel  $\pm$  et inferiores a basi omnino refracti. Calyx cupularis, 3–4 mm. longus, infra dimidium usque in lobos triangulare-lanceolatos, argute trinervios, hydathodibus crassis terminatos, porrectos fissus, herbaceus. (Corolla ignota). Capsula calycis tubum paulo excedens, rotundata, pallide brunnea; stylus  $\frac{1}{2}$  mm. longus, crassus.

Kweichou. Majo-Longly, 1908. Cavalerie in herb. Paris.

In habit this species comes near *A. kouytchensis* Bonati, otherwise it is very different. It was in the same cover with *A. runcinata*, but loose on a different sheet, with but one label for both, whence the habitat is perhaps not too certain.

**A. gracilis** (p. 271). Insert: N.E. Yunnan. Cime de la montagne entre Ngay tien pa et Pa eul ngai, a 12 lieues de Tchen fong Chan; dans les herbes au bord de la route, fl. roses. 17. IV. 1901 Ducloux 2023. Vallon de Ku long tchang, 800 m. Maire. Both in herb. Paris.

**A. saxifragifolia** (p. 271). According to Merrill this plant should bear the older name **A. umbellata** (Lour.) Merr. in Philipp. Jour. Sc. XV. (1919) 237. Syn.: *Drosera umbellata* Lour., Fl. Cochinch. (1790) 186.

**A. Gmelini** var. **geophila** (p. 272). Add: Kansu. Potanin (Herb. Kew.). W. Kansu, Ha si t'an. Lichen 4591.

The typical species has not been found in China.

**A. dissecta** (p. 272). Insert: Syn.: *A. geraniifolia* var.  $\gamma$  *setosa* Knuth p.p.

W. Szechuan. Bonvalot et Orléans.

This specimen, which was determined *A. geraniifolia* by Franchet, is not from Lhasa, as Knuth believed, but shows that *A. dissecta* is distributed up to the latitude of Tachienlu.

**A. geraniifolia** (p. 273) var.  $\gamma$  *setosa* Knuth p.p., Hobson's specimen only. The name is misleading, for the indument is quite soft, only somewhat denser than usual. Delete: "Orléans sec. Knuth."

**A. axillaris** (p. 275). *A. similis* Craib in Kew Bull. (1922) 238 falls within the limits of variation.

S.W. Szechuan. Eulseying. Legendre 807. The northern-most station ( $28^{\circ} 27'$  N.).

*A. tonkinensis* Bonati (p. 278) is a *Mitrasacme*.

*A. Jacquemontii* (p. 279). *A. ferruginea* Watt is no doubt only a small state of this, the specimen having a typical scape with umbel.

*A. robusta* (Kn.) Hand.-Mzt. (p. 279). Replace this name by *A. muscoidea* Duby (*A. Chamaejasme* var. *uniflora* Hook.—*A. villosa* var.  $\delta$  *robusta* f. 2. *breviscapa* Kn.—*A. robusta* Hand.-Mzt.). Duby's type matches Knuth's f.2 *breviscapa*, but the name must stand for the whole species, the more common larger specimens of which may be called *muscoidea* f. *longiscapa* (Kn.) Hand.-Mzt. (*A. villosa* var.  $\delta$  *robusta* f. 1. *longiscapa* Knuth).

*A. villosa* (p. 279) is also typically represented on the "Top of Lebanon." Lowne in herb. Kew.

*A. globifera* Duby (p. 279) is not the same plant as was identified in the Kew herbarium with *A. Poissonii*. It is rather near *A. muscoidea*, but differs by leaves much more acute, with few and feeble asperities only, and forming circles alternating almost glabrous and very pilose. The name is scarcely descriptive.

**A. incana** (p. 280). The distribution begins at Irkutsk, west of lake Baical (Herb. Kew).

**A. Brahmaputrae** Hand.-Mzt., nom. nov.

(*A. bisulca* Hand.-Mzt. in N.R.B.G. Edin. XV. 267, 280 excl. loco Szechuan).

**A. bisulca** Bur. et Franch. (p. 280).

Syn. : *A. aurata* Ptmgm.

W. Szechuan. Bonvalot et Orléans. Wilson 4008.

The type specimens show indeed no difference at all from Wilson's plant. The colour of the flowers cannot be seen at all, nor is there any note on it by the collectors. Thus I must believe that Franchet somewhat mechanically wrote "albae vel carneae," as there was no yellow *Androsace* known at this time.

**A. Lehmanniana** (p. 281). Add : Gyda Tundra a.d. Ob-Mündung. Tolmatschew 676, 701, in herb. Stockholm.

*A. apus* Franch., based on very scanty material, recalls in indument *A. zambalensis* and is probably a reduced form belonging to the affinity of *A. Lehmanniana*.

*A. Chamaejasme* var. *ciliata*, from the rather scanty specimens yet seen by me, will probably prove to be a quite different species.

**A. Delavayi** (p. 284). Insert : Syn. : *A. Poissonii* Knuth. The species is distributed through the Himalayas (E. Himalaya. Griffith, herb. Kew.) to Garhwal.

P. 285, line 7. Delete : *A. muscoidea* . . . here.

**A. yargongensis** (p. 286). Add : Kiala : Sou ra la tho. Soulié 533. S.W. Kansu. Rock 13040, with large softly pilose inner leaves. Having seen the type myself, I found my interpretation correct.**A. Mariae** Kan. var. **trachyloma** Hand.-Mzt., var. nov.

Surculis fasciculatis e radicis longae apice oriundis numerosis 3-14 cm. longis simplicibus vel iteratim fasciculato-ramosus ubique foliorum residuis mortuis vestitis late cespitosus. Folia marginibus minus distincte cartilagineis setulis irregulariter pluriseriatis imprimis antice brevibus aspera, faciebus glabra vel plus minus aspera, basi in vaginas paulum dilatatas interdum brunneas margine longiciliatas attenuata.

N.W. Yunnan. Mekong valley, 10 miles S. of Ya-ka-lo, 10-11,000 ft. Forms tussocks on earth slopes, more or less shaded. Slate, metamorphic rock, etc. Abundant. 23. IX. 1922 in fruit. F. K. Ward 5412.

The mode of growth is considerably different from the other specimens of *A. Mariae* known to me. It would be necessary to

find by observation in the field, in how far it is constant or dependent on the peculiarities of the Mekong locality which is far away from the distributional area thus far known. The other distinguishing characters, although very obvious, are somewhat variable in the three specimens, so that further gatherings are necessary to determine whether the plant merits specific rank or not.

**A. longifolia** (p. 289). Add: Ala shan. Przewalski. C. Shansi, entre Choei you et Niou tch'oan. Licent 3667.

**A. Limprichtii** (p. 289). Add: W. Szechuan. Soulié 270, 270 bis, 2245. Bonvalot et Orléans 48. Mussot 275.

**A. rigida** (p. 290). Add: Yunnan. Delavay 4514.

**A. Forrestiana** Hand.-Mzt. (p. 293). Add: N.W. Yunnan: Ronsha river, Mekong-Yangtze divide, on wooded schistose cliffs above the river. 8000 ft. 8. VIII. 1922. F. K. Ward 5315.

37a. **A. stenophylla** (Ptmgm.) Hand.-Mzt.

Syn.: *A. sarmentosa* var. *stenophylla*, which strike out under *A. Wardii* (p. 294).

W. Szechuan. Zamba-la, pelouses, buissons des hautes montagnes. Soulié 3411.

This plant cannot be placed under *A. Wardii*, for its mode of growth is more like to that of *A. sublanata*, exhibiting more rosettes, sessile on a simple and short, upright rhizome and rarely only very short and thick branches; the indument is also essentially longer, more like that of *A. Forrestiana*. The outer leaves, several times shorter than the inner but of the same herbaceous consistency, are more penicillately pilose and run gradually into these.

**A. septentrionalis** (p. 296). Add: Ala-shan. Przewalski. Urato. David 2672.

*A. elongata* (p. 297). All the Chinese plants under this name belong to *A. Engleri*, as do also the synonyms *A. elongata* Forb. et Hemsl., and Knuth (var. *typica*), non L.; *A. elongata* var. *nana* Maxim., non Duby; *A. elongata* var. *mongolica* Knuth.

W. Kansu. Potanin.

W. Mongolia. Sartchy. David. Ta tsing chan. David. S. Ordos, vers Tchuan tsinn. Licent 5893.

Manchuria. Vallée du Keroulen. Chaffanjon 1787.

Only in David's plants do I find very minute furcate hairs mixed largely with the simple ones.

**A. filiformis** (p. 297). Add: C. Mongolia. Nan shan, 2175 m. Lichen 3490. W. Hupeh. Fang Hsien. Wilson, Arn. Arb. Exp. 4697.

When using the key it should be noted that *A. runcinata* comes under § 4, *A. refracta* under § 7 and *A. stenophylla* under § 27.

Species excludenda: *A. tonkinensis* Bonati. See above p. 163.